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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/733,359

12/12/2003

Seiji Takeuchi

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07/28/2006

FITZPATRICK CELLA HARPER & SCINTO  
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EXAMINER

PUNNOOSE, ROY M

ART UNIT

PAPER NUMBER

2877

DATE MAILED: 07/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/733,359	Applicant(s) TAKEUCHI ET AL.	
	Examiner Roy M. Punnoose	Art Unit 2877	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2006.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.  
     4a) Of the above claim(s) 10-14 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-8, 15 and 16 is/are allowed.
- 6) ☒ Claim(s) 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/2004; 3/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election*

1. Acknowledgment is made of applicant's election with traverse of claims 1-9 and 15-16 filed on April 24, 2006 in response to the office action of March 23, 2006. Applicant's basis for the traversal is that the different groups are closely related as to not require separate fields of search. The applicant's argument is not persuasive because the reason for the restriction was that the invention of each group is distinct and not that it required separate searches. The applicant has not presented any argument(s) based on the reason for restriction.

The requirement for restriction is still deemed proper and therefore is made FINAL.

2. Claims 10-14 have been withdrawn from consideration.

### *Drawings*

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore:

a. The Stokes meter of claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

b. The embodiments as claimed in claims 9 and 15-16 are not shown in drawings. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure

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must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morita (US\_6,266,141 B1).

6. Claim 9 is rejected because:

A. Morita teaches of an apparatus comprising a light projecting unit 3 for projecting approximately circularly polarized light (see col.6, lines 41-44) upon a sample 1, a plurality of light receiving portions (see abstract) for detecting light from the sample 1 and calculating means 23 for measuring birefringence of a sample material so that the quality of the material for different optical applications can be accurately determined.

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- B. However, Morita does not explicitly teach of detecting a light quantity of light from the sample for measuring birefringence of a sample material so that the quality of the material for different optical applications can be accurately determined.
- C. The examiner makes official notice that it is well known in the art that light quantity is the measure of light received by a detector in a unit time. Further, Morita's apparatus is capable of measuring the light quantity, and therefore it meets the claim requirements. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.
- D. In view of what is well known in the art, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate what is well known into Morita's apparatus due to the fact that such a combination would provide an apparatus that is more accurate because detecting light quantity can be varied to optimize the accuracy of the apparatus for measuring birefringence of a sample material so that the quality of the material for different optical applications can be accurately determined.
- E. With regard to detecting birefringence of the sample on the basis of the Stokes parameter, the change in polarization of light is detected by Morita's apparatus and polarization is a Stokes parameter.

***Allowable Subject Matter***

- 7. Claims 1-8 and 15-16 are allowable.

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8. Claim 1 is allowable because, prior art of record taken alone or in combination, fails to disclose or render obvious an apparatus comprising a Stokes meter for detecting a state of polarization of light from the sample and calculating birefringence of the sample on the basis of a Stokes parameter from said Stokes meter, in combination with the rest of the limitations of said claim.
9. Claims 2-8 are allowable because they are dependent on independent claim 1, or an intermediate claim, and they include all the allowable limitations of the parent claim(s).
10. Claim 15 is allowable because, prior art of record taken alone or in combination, fails to disclose or render obvious a method of measuring birefringence comprising, detecting a light quantity of light from the sample, and determining a Stokes parameter on the basis of the detection of the light quantity, in combination with the rest of the limitations of said claim.
11. Claim 16 is allowable because it is dependent on independent claim 15.

***Contact/Status Information***

12. Several facts have been relied upon from the personal knowledge of the examiner about which the examiner took Official Notice in this office action. Applicant must seasonably challenge well known statements and statements based on personal knowledge when they are made. In re Selmi, 156 F.2d 96, 70 USPQ 197 (CCPA 1946); In re Fischer, 125 F.2d 725, 52 USPQ 473 (CCPA 1942). See also In re Boon, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice). If applicant does not seasonably traverse the well-known statement during examination, then the object of the well known statement is taken to be admitted prior art. In re Chevenard, 139 F.2d

71, 60 USPQ 239 (CCPA 1943). A seasonable challenge constitutes a demand for evidence made as soon as practicable during prosecution. Thus, applicant is charged with rebutting the well-known statement in the **next reply** after the Office action in which the well known statement was made.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Roy M. Punnoose** whose telephone number is **571-272-2427**. The examiner can normally be reached on 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Gregory J. Toatley, Jr.** can be reached on **571-272-2800 ext.77**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Roy M. Punnoose**  
Patent Examiner  
Art Unit 2877  
July 10, 2006



**HWA (ANDREW) LEE**  
**PRIMARY EXAMINER**

for:

**Gregory J. Toatley, Jr.**  
Supervisory Patent Examiner

